

**THIS OPINION WAS NOT WRITTEN FOR PUBLICATION**

The opinion in support of the decision being entered today  
(1) was not written for publication in a law journal and  
(2) is not binding precedent of the Board.

Paper No. 11

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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***Ex parte*** LLOYD C. GOSS

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Appeal No. 96-3704  
Application 08/216,474<sup>1</sup>

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ON BRIEF

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Before JERRY SMITH, FLEMING and FRAHM, ***Administrative Patent Judges.***

FLEMING, ***Administrative Patent Judge.***

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<sup>1</sup> Application for patent filed March 22, 1994.

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Application 08/216,474

### ***DECISION ON APPEAL***

This is a decision on appeal from the final rejection of claims 1 through 6 and 8 through 14. Claim 7 has been cancelled. Claims 15 through 19 have been withdrawn from consideration.

The invention relates to a head suspension assembly for positioning a floating read-write head assembly for use in a computer disk drive memory. In particular, the head suspension assembly has a monocoque region 30 shown in Figure 2. The monocoque region is shown in cross section in Figure 4. The monocoque region is a hollow shell having a closed plane figure cross-sectional profile. This allows an integrated circuit to be placed within the hollow shell of the monocoque region as shown in Figure 2.

Independent claim 1 is reproduced as follows:

1. A head suspension assembly for positioning a floating head assembly having electrical terminals over selected tracks on the surface of a rotating data storage device, said head suspension assembly comprising;

a first surface;

a proximal end region;

a gimbal region for providing gimbaling support to a head assembly;

a spring region adjacent the proximal end region;

a monocoque region located in between the gimbal region and the spring region, where the monocoque region is a hollow shell having a closed plane figure cross sectional profile and covering an inner chamber, the monocoque region including a ceiling region and a floor region separated and spaced from each other;

an integrated circuit substantially encased inside the inner chamber, between the ceiling region and the floor region, the integrated circuit having a plurality of control pins and a plurality of read-write pins;

a first set of electrical conductors connecting electrical terminals on a head assembly to the read-write pins;

a second set of electrical conductors connecting the control pins to exit terminal means for electrically coupling the second set of conductors to circuitry outside of the head suspension assembly wherein the first and the second set of conductors are placed over the first surface and include conductors made of a conductive material laid down in long strips atop a thin insulating coating which electrically isolates the conductors from the first surface.

The Examiner relies on the following references:

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Slezak	5,121,273	June 9, 1992
Hashimoto (Japanese Kokai)	59-207065	Nov. 24, 1984
Morikawa (Japanese Kokai)	3-25717	Feb. 4, 1991
Toda (Japanese Kokai)	4-219618	Aug. 10, 1992
Oe et al. (Oe) (Japanese Kokai)	4-219066	Oct. 15, 1992

Claims 1 through 6, 8 through 11, 13 and 14 are rejected under 35 U.S.C. § 103 as being unpatentable over Hashimoto in view of Morikawa and Slezak. Claims 1 through 6, 8, 11, 13 and 14 are rejected under 35 U.S.C. § 103 as being unpatentable over Hashimoto in view of Morikawa and Toda. Claim 12 is rejected under 35 U.S.C. § 103 as being unpatentable over Hashimoto in view of Morikawa and Toda or Slezak and further in view of Oe. On page 14 of the Examiner's answer, the Examiner sets forth a new ground of rejection in which claims 8 through 11 and 13 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Appellant regards as the invention.

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Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the brief and answer for the respective details thereof.

### **OPINION**

We will not sustain the rejection of claims 1 through 6 and 8 through 14 under 35 U.S.C. § 103.

The Examiner has failed to set forth a ***prima facie*** case. It is the burden of the Examiner to establish why one having ordinary skill in the art would have been led to the

claimed invention by the express teachings or suggestions found in the prior art, or by implications contained in such teachings or suggestions. ***In re Sernaker***, 702 F.2d 989, 995, 217 USPQ 1, 6 (Fed. Cir. 1983). "Additionally, when determining obviousness, the claimed invention should be considered as a whole; there is no legally recognizable

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'heart' of the invention." *Para-Ordnance Mfg. v. SGS Importers Int'l, Inc.*, 73 F.3d 1085, 1087, 37 USPQ2d 1237, 1239 (Fed. Cir. 1995), *cert. denied*, 117 S.Ct. 80 (1996) *citing W. L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1548, 220 USPQ 303, 309 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984).

Appellant argues on pages 12 through 16 of the brief that the present claims are not rendered obvious by any of the teachings of the Hashimoto, Morikawa, Slezak, Toda and Oe references, whether taken separately or in combination with any of the other references of record. Appellant argues that the Examiner has failed to show that the prior art suggests, expresses or implies a combination of a monocoque load beam in which an integrated circuit chip is mounted in the enclosed shell portion of the monocoque region of the load beam as required in

Appellant's claims 1 through 6 and 8 through 14. On page 4 of the Examiner's answer, the Examiner states that Hashimoto does

not expressly show an integrated circuit provided on the load beam within the monocoque region. The Examiner further states that Morikawa teaches providing an integrated circuit on a load beam. On page 5 of the Examiner's answer, the Examiner argues that it would have been obvious to one of ordinary skill in the art to provide an integrated circuit chip on the suspension load beam of Hashimoto as taught by Morikawa. The Examiner reasons that the modification would have been motivated in order to reduce external noise interference within the lead wires as expressly suggested by Morikawa.

The Federal Circuit states that "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." ***In re Fritch***, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), ***citing In re Gordon***, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." ***Para-Ordnance Mfg.***, 73 F.3d at

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1087, 37 USPQ2d at 1239, **citing** *W. L. Gore*, 721 F.2d at 1551, 1553, 220 USPQ at 311, 312-313.

Turning to Appellant's claims, we note that the claims require a monocoque load beam in which an integrated circuit chip is mounted within the enclosed shell portion of the monocoque region of the load beam. In particular, Appellant's claim 1 recites the following:

a monocoque region located in between the gimbal region and the spring region, where the monocoque region is a hollow shell having a closed plane figure cross sectional profile and covering an inner chamber, the monocoque region including a ceiling region and a floor region separated and spaced from each other;

an integrated circuit substantially encased inside the inner chamber, between the ceiling region and the floor region.

We note that Appellant's only other independent claim, claim 13, requires similar limitations requiring an integrated circuit encased inside the inner chamber of the monocoque region.

Upon our close review of Hashimoto, we note that Hashimoto teaches in Figures 4a, b, c and d a structure having



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a shell-like structure between the gimbal spring and the floating head. We also note that Hashimoto fails to teach placement of an integrated circuit anywhere on this structure.

Upon our close review of Morikawa, we find that Morikawa teaches on page 7 that Figure 1 is a top view of the practical example of the main part of the magnetic head device of Morikawa's invention. Morikawa shows an integrated circuit 5 placed on top of the head suspension 3. We note that Morikawa does not teach a shell in which the integrated circuit is placed inside. Furthermore, we note that Morikawa does not teach the same structure that Hashimoto teaches in which the head suspension includes a hollow structure.

Upon a close review of the Examiner's answer, we fail to find that the Examiner has addressed Appellant's argument as to why one of ordinary skill in the art would have a reason to place the integrated circuit within the hollow

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structure as disclosed in Hashimoto. Upon reviewing the art cited by the Examiner, we fail to find that this art suggests any desirability of the proposed Examiner's modification. Therefore, we will not sustain the rejection of claims 1 through 6 and 8 through 14 under 35 U.S.C. § 103.

Due to a new ground of rejection, claims 8 through 11 and 13 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and

distinctly claim the subject matter which Appellant regards as the invention. We note that the Appellant has failed to respond to this new ground of rejection.<sup>2</sup>

37 CFR § 1.193(b) as amended at 58 Fed. Reg. 54510, Oct. 22, 1993, which was controlling at the time of Appellant's filing the brief, states as follows:

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<sup>2</sup> In a conversation on March 4, 1999 with Pamela Bennett, Paralegal Specialist for the Board of Patent Appeals and Interferences, Walter Linder, Registration No. 31,707, informed Ms. Bennett that no response to the new ground of rejection in the Examiner's Answer was filed.

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If the examiner's answer expressly states that it includes a new ground of rejection, appellant must file a reply thereto within two months from the date of such answer to avoid dismissal of the appeal as to the claims subject to the new ground of rejection.

Since Appellant did not file a reply to the new ground of rejection within two months from the date of the answer, we dismiss the appeal as to claims 8 through 11 and 13.

In view of the foregoing, the decision of the Examiner rejecting claims 8 through 11 and 13 under 35 U.S.C. § 112, second paragraph, is affirmed. However, the decision of the Examiner rejecting claims 1 through 6 and 14 under 35 U.S.C. § 103 is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

***AFFIRMED-IN-PART***

JERRY SMITH )  
Administrative Patent Judge )

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